DICTIONARY OF ENGINEERING DATA/CONFIGURATION MANAGEMENT AND CATALOGING/PROVISIONING TERMS

DEVELOPED IN SUPPORT OF
AIR FORCE MATERIAL COMMAND (AFMC)
INTEGRATED WEAPON SYSTEM MANAGEMENT (IWSM)
TECHNICAL INFORMATION PROCESS ACTION TEAM (PAT)
ACTION ITEM E46

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FOREWORD

This dictionary is prepared for an Air Force Integrated Weapon System Management Process Action Team, Action Item E46, for the purpose of identifying terms and definitions in logistics that adversely impact interoperability of existing and future databases.

Terms and term definitions used for the identification of parts and documents vary incompatibly among the disciplines of engineering data, technical manuals, provisioning, DFARSS6 screening, and cataloging. These incompatibilities will severely impair the development of interfaceable databases. Examples of conflicts include "manufacturer", "item identification", "reference number", "part number", "source", "source of supply", "contractor", "original design activity", and mutually undefined terms such as "OEM" and "prime".

This dictionary compares key terms and definitions from the disciplines of configuration/engineering and provisioning/cataloging, and identifies the source document, including colloquial and dialectical departures from each. Comments and comparisons are provided in a "neutral" zone between the definitions.

This dictionary will be of assistance to personnel who:

a. develop, or prepare functional descriptions for, databases involving any of the above named disciplines.
b. work on CALS related projects.
c. perform DFARSS6 screening functions.
d. perform engineering data management functions.
e. perform configuration management functions.
f. perform provisioning or cataloging functions.
g. perform acquisition functions.
h. develop policy and procedures for any of the above named functions.
i. discuss topics and needs with personnel across logistics and configuration, engineering, and acquisition disciplines.

The original and still documented design of the cataloging system has absolutely no connection with “sources" (where an item identified by part number and issuing CAGE code could be procured). It must be noted that new direction from DLA to add "sources" has severely exceeded the designed capabilities of the cataloging system, and is radically eroding the former useability and reliability of the information therein. It is currently not possible for configuration, engineering, or acquisition databases to interface with the cataloging database and obtain coherent, reliable information from it for their uses.

TERM	ENGINEERING DATA AND CONFIGURATION MANAGEMENT DEFINITION	COMMENTS AND COMPARISONS	PROVISIONING AND CATALOGING DEFINITIONS
ADMINIS-TRATIVE CONTROL NUMBER	**ASME Y14.24-89, APPENDIX A, DEFINTIONS. Administrative Control Number -- a number assigned to one or more interchangeable purchased items by a vendor item drawing (VID) for administrative control purposes. An administrative control number may also be assigned to a subcontractor designed item by a Design Control Drawing (DCD). This number also serves as the part or identifying number for specifying such items in a parts list. The administrative control number includes the VID or DCD number, and is assigned in addition to the item identification assigned by the original design activity.**	Term is used as the "performance based" identifier established by a performance specification for the purpose of generically identifying a group of interchangeable items that are made to disclosure drawings. When a Commercial Item Description establishes an adequate control number for finite identification, the CID control number also is called an administrative control number. It must be noted that the DCD item may or may not be reidentified to the control number established on the drawing, depending on the "rules" set up by the DCD. For the source control drawing, the items are reidentified to the source control part number established by the drawing, and the vendor part numbers cease to exist for identification purposes.	None

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COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE	**MIL-STD-100G PARA 3.11: "A five character code listed in Cataloging Handbook H4/8, Commercial and Government Entity (CAGE) code, which is assigned to commercial and Government entities that manufacture or develop items, or provide services or supplies to the government. When used with a drawing number or a part number, the CAGE code designates the design activity from whose series the drawing or PIN is assigned. The CAGE code was previously called manufacturer's code, code identification number, or Federal Supply Code for Manufacturers (FSCM)."** COMMENT: I.e., when the CAGE code is used in conjunction with a drawing number or part number, the CAGE code used always defaults to the original design activity that issued the numbers assigned to the drawing and to the parts thereon, regardless of the current status of the original design activity.	In brief, a CAGE code is a "shorthand" number used to designate a name and address. Very convenient for data bases, in which a complex name, address, and phone number can be represented by only five digits. A common, serious error is to mistake the CAGE code for a "manufacturer's code". Used by itself, it has no relationship to "manufacturer". The CAGE code alone merely represents ONLY a name and address, or "entity", and nothing else. **It does *NOT* mean "manufacturer",** nor does it imply a FUNCTION of the entity, such as "manufacturer". **The FUNCTIONAL relationship of a CAGE, or CAGE code, is accomplished by prefixing the CAGE code with a "whose" adjective to form a noun phrase, such as "supplier CAGE", "prime contractor CAGE", "vendor CAGE", "Government procuring activity CAGE", "original design activity (ODA) CAGE", "current design activity CAGE", "subcontractor CAGE", etc.** The ODA CAGE code number is always permanently assigned to a drawing and part number. The part number or drawing number and the permanently assigned CAGE code becomes a part of their permanent "two data elements (fields) used conjunctively" system of their identification. "Replacement" of a CAGE code in the H8 has no impact on the current design activity for an item, as the product line may have been sold to another CAGE code activity other than the "replacement" shown in the H8.	**DOD 4100.39-M VOL 12 DRN9250: CODE ASSIGNED TO ESTABLISHMENTS WHICH EITHER FABRICATES ITEMS OF PRODUCTION AND/OR HAVE DESIGN CONTROL OF ITEMS PROCURED BY THE FEDERAL GOVERNMENT, OR TO IDENTIFY CERTAIN MILITARY SPECIFICATIONS OR STANDARDS, AND CERTAIN NUMBERING SYSTEMS DEVELOPED BY GOVERNMENT AGENCIES, PANELS OR COMMITTEES. USED IN THE IDENTIFICATION OF CATALOG DATA IN THE FEDERAL CATALOG SYSTEM AND ALSO FOR IDENTIFYING CONTRACTORS FOR THE MECHANICAL INTERCHANGE OF DATA REQUIRED BY MILSCAP AND THE SERVICES/AGENCIES ADP SYSTEMS. SEE VOLUME 10, TABLES 20, 21, 40, AND 94** **DOD 4100.39-M VOL 1: "Any reference number entered into the Federal Catalog System will have a CAGE Code assigned to it prior to entering the central catalog file. The CAGE Code is a five character data element assigned to establishments which are manufacturers or have design control of items of supply procured by the Federal Government. The first and last positions of a CAGE Code will be numeric. Under certain conditions revision actions shall be initiated by DLSC: When a CAGE Code is canceled and replaced by a code assigned to a single manufacturer; or when DLSC cannot determine, without collaboration, which items formerly manufactured by a defunct organization are now manufactured by the acquiring organization(s)."**

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CONTRACTOR	**MIL-STD-100E PARA 3.20: An individual, partnership, company, corporation, association or other service having a contract with the procuring activity for the design, development, manufacture, maintenance, modification or supply of items under the terms of a contract. A Government activity performing any or all of the above functions is considered to be a contractor for engineering drawing purposes. (MIL-STD-480)**	The key words to being classified a contractor are "having a contract with the with the procuring activity". For item identification purposes, the contractor has no relationship whatever to original or current design activity. The contractor may subcontract design activity functions to a multitude of subcontractors for some or all items deliverable under the contract.	**DEFINITION: MIL-STD-1388-1A, APPENDIX B, PARA 20: "Any individual, partnership, public or private corporation, association, institution, or other entity which enters into a specific contract with the government to provide supplies or services."**
CONTROL DRAWINGS	**ASME Y14.24M-1989 section 8** includes the following types of **CONTROL DRAWINGS**: **Procurement Control Drawing** **Vendor Item Drawing** (to be replaced with "Vendor Item Control Drawing") **Source Control Drawing** **Design Control Drawing** **Interface Control Drawing** **Identification Cross Reference Drawing** **MIL-STD-100E, PARA 204.2 NOTE 4, A control drawing is a drawing disclosing engineering form, fit, function, and performance requirements for the acquisition of interchangeable purchased items of existing designs, or of items specially developed by vendors to the control drawing requirements. Control drawings permit the acquisition of vendor developed items from specialized segments of industry without disclosing details of designs or divulging proprietary vendor data. A Standardized Military Drawing is a Government peculiar control drawing. See 204.2.3.**	Control drawings establish performance based identification of items, which control the group of interchangeable design disclosure items that meet the control drawing's requirements.	**None**

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DESIGN ACTIVITY	**MIL-STD-100G PARA 3.21: "A design activity is an activity that has, or has had, responsibility for the design of an item. The activity may be Government, commercial, or nonprofit organization (ASME Y14.24)." See also "current design activity" and "original design activity".** **MIL-STD-100G PARA 406.9: "When the design responsibility for engineering drawings are transferred from one design activity to another, the drawing number(s) and part numbers(s) shall be transferred to the new design activity for administration. The new assignee shall add his CAGE Code, name, and address on the drawing by revision action to identify change in design responsibility. .In no case will the original drawing identity be changed or relocated to indicate a new CAGE Code. In addition, the CAGE Code of the original design activity specified in the item identification marking requirement shall not be changed. Figure 400-2 illustrates an example of drawing notations indicating a transfer of design responsibility.** **NOTE: In addition, the CAGE code of the original design activity specified in the item identification marking requirement shall not be changed"** PRACTICAL APPLICATION: In context with the MIL-STD-100 and MIL-STD-130 identification of any item, the "design activity" defaults to the design activity (always the original) shown in the title block of the drawing, which never changes. The current design activity has no relationship to identification.	Not adequately definitive. Do not use this term. Term obsolete for use due to confusion over "current" vs "original". ***Use the replacement terms "current design activity" or "original design activity".*** COMMENT: Some within the cataloging community claim that the cataloging system does not use or recognize MIL-STD-100, MIL-STD-130, and MIL-STD-973 terms such as "design activity", "original design activity, and "current design activity. Sources within cataloging disclose that their personnel do not receive any training,, in any form, on MIL-STD-100 identification of items and drawings.	**DEFINITION: None.**

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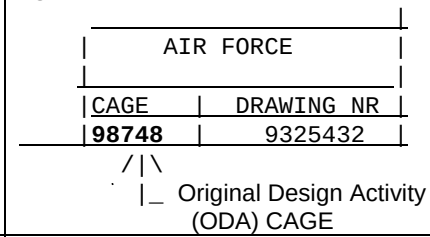
DESIGN ACTIVITY, CURRENT	**MIL-STD-100E PARA 3.24: "An activity (Government or contractor) currently having responsibility for the design of an item, and the preparation and maintenance of drawings and associated documents. Current design activity could be the original activity or new activity when that responsibility is transferred from another Government or contractor design activity."**	This term has no relationship to the identification of items. Items are identified to their ORIGINAL design activity -- not the current.	**DEFINITION: None**
DESIGN ACTIVITY, ORIGINAL	**MIL-STD-100E PARA 3.59: "An activity (Government or contractor) having had responsibility originally for the design of an item and whose drawing number and CAGE code is shown in the title block of drawings and associated documents."** The original design activity on a drawing is normally found in the title block in the lower right corner. EXAMPLE:  	CALS CRITICAL TERM. Next to part numbers, this term and its CAGE code is the second most important data element for identifying parts in a CALS, engineering, and configuration management environment. Data bases use two data elements to establish an item identification:: the part number and the CAGE code of this "original design activity". It is imperative that all personnel in the disciplines of engineering, configuration management, technical manuals, CALS, and related areas clearly and thoroughly understand this term and use it properly. See "item identification".	**DEFINITION: None.**
DESIGN CONTROL ACTIVITY	**DEFINITION: None.** PRACTICAL APPLICATION: The Government activity that exercises configuration management and design control over a contractor design activity.		**DEFINITION: None.** COLLOQUIAL DEFINITION: The activity that manufactures a part. Also, the activity that "controls the design", which may be the manufacturer, government, vendor, prime contractor, and others. The single activity which controls the design is not clearly established, as all may perform some degree of design control.

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DESIGN CONTROL DRAWING	**ASME Y14.24, SECTION 8.3.1.** **DESCRIPTION: A design control drawing discloses the basic technical information and performance requirements necessary for a subcontractor to complete the detailed design required to develop and produce and item. The design control drawing specifies the unique identifier of the item -- the identification may be that assigned by the subcontractor's design disclosure drawings (if known) or it may be an administrative control number assigned by the design control drawing. In the latter case, the design control drawing shall remain in the drawing hierarchy as shown in Fig. 2.**		**None.** **See Design Control Reference, Reference, Control Drawings, and Administrative Control Numbers**

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DESIGN CONTROL REFERENCE	**DEFINITION: None.** COLLOQUIAL DEFINITION: A "design control reference" is a reference made by a document to another document that establishes a form, fit, and function type requirement for the development of interchangeable items. This is as opposed to "design disclosure references" which are references to drawings that establish complete design disclosure drawings (manufacturing data) for a specific item.	COMMENT: Cataloging uses the term "design control reference" in conflict with customer use. To cataloging, "reference" is used interchangeably (incorrectly) with "part number". The customer community, per MIL-STD-100, has a "design control drawing" which is similar to as "source control drawing". To the customer, a "design control reference" is a part number established on a "design control drawing", in the same manner that a source control drawing establishes a "source control reference" or part number. In practice, the term "design control reference" as used by cataloging conflicts, as it is sometimes performance in nature, and sometimes is design disclosure drawing in nature. A design control number as used by customers is always performance in nature. In addition, in the cataloging definition of "design control reference", the term "item of production" should be corrected to read "item of supply", as in "the dominant part number and CAGE, where there are two or more, used to identify the stock number".	**DOD 4100.39-M VOL 1: "The primary number used to identify an item of production, by the manufacturer (individual company, firm, corporation, or Government activity) which controls the design, characteristics, and production of the item by means of its engineering drawings, specifications, and inspection requirements".**
DESIGN DISCLOSURE DRAWINGS	**ASME Y14.24M-1989, APPENDIX A, DEFINITIONS: Design Disclosure Drawings -- A set of drawings and associated data which delineates the detailed engineering requirements of an end product necessary for the fabrication, assembly, inspection, and test of the item.**		

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ENGINEERING DATA	**MIL-STD-100E, PARA 3.34: Engineering documents such as drawings, associated lists, accompanying documents, manufacturer specifications and standards, or other information prepared by a design activity and relating to the design, manufacture, procurement, test or inspection of items.**	Engineering data often does NOT satisfy cataloging requirements. Engineering data often merely calls out part numbers and CAGE codes, which does not provide the "characteristics" that cataloging is required by a 1952 law to obtain. Thus, extractions from engineering data is often not adequate for provisioning, and must be supplemented by other "non-engineering data" such as catalogs, sketches, owners manuals, photos, brochures, etc..	**DEFINITION: None.**
ITEM	**MIL-STD-100E PARA 3.43: "A non-specific term used to denote any unit or product including materials, parts, assemblies, equipment, accessories and computer software."**	COMMENT: This is an area of major communication breakdown between cataloging and its customers. Engineering and configuration think of an "item" as a piece of hardware with a part number, and do not associate an item with a stock number. In conflict, cataloging and provisioning think of an "item" as a stock number, with its attendant ERRC, RNCC, RNCC, AAC, DAC, and ISC codes, and AIN.	**DEFINITION: None.** COLLOQUIAL DEFINITION: A stock number.

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ITEM IDENTIFI-CATION	**MIL-STD-100E PARA 3.44: "The combination of the part or identifying number and the original design activity CAGE code. (NOTE: Not applicable to vendor item drawings)" (Sic: Not applicable to vendor items shown on vendor item control drawings.)**	***CALS CRITICAL TERM. The complete "What we call it in all information systems" to uniquely distinguish a specific part from all other parts, including parts listed under NSNs.*** A severe conflict in definitions exists here that impairs existing programs, and seriously impairs the success of future CALS programs. Engineering/configuration's "item identification" finitely establishes the identification of a specific single item by specifying a PIN and its ODA CAGE code concurrently. In database systems, the PIN goes in the PIN entry, and the ODA CAGE code goes in the CAGE code entry to form a conjunctive "cradle to grave" never changing identification of a part. Engineering/configuration's "item identification" is totally unrelated to identification of a stock number. In complete conflict, cataloging's definition of "item identification" is "item ***OF SUPPLY*** identification" (i.e., NSN identification).	**DOD 4100.39-M VOL 1: "A collection and compilation of data to describe an item. The minimum data to develop an item identification are a combination of the item name, FSCM, manufacturer's identifying part/reference number, Reference Number Category Code (RNCC), and Reference Number Variation Code (RNVC). The maximum data required are the item name, all of the physical and performance characteristics data prescribed by a specific FIIG, and manufacturer's identifying part/reference number. It may also include additional reference numbers."** PRACTICAL APPLICATION: The "item identification" is that data necessary to establish an NSN, and not a specific item. ("It may also include additional reference numbers".) "Item identification" thus equates to "NSN identification", or "item of supply identification" (see NIIN) as "item identification" includes "CAGE codes, FIIGs, RNCCs, RNVCs, AAC, reference number(s), ERRC, ISC, noun", etc., in a totaled relationship to the NSN. Importantly, for the identification of items within this "item identification" (item of supply identification) there is severe disagreement within the cataloging community about what the CAGE code next to the

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(Item Identification continued)		However, cataloging's "item (OF SUPPLY) identification" DOES NOT PROVIDE THE ITEM IDENTIFICATION ESSENTIAL FOR ITS ENGINEERING, CONFIGURATION, ACQUISITION, AND MANUFACTURING CUSTOMERS. I.e., the precise relationship of a CAGE code to a part number is not defined or provided by cataloging. Direct inquiries to cataloging policy offices regarding interpretation of what the CAGE code represents (design activity, supplier, etc.) beside a part number are contradictory. One policy office stated that "The cataloging system does not make that distinction", and another said it was "not necessarily the supplier". In other words, cataloging does not know what the CAGE code represents when used in conjunction with the part number in the cataloging system. The engineering/configuration term "item identification" and its definition (i.e., concurrent use of ODA CAGE and PIN) is a vital, indispensable tool in a CALS database environment for the finite identification of items. It has been developed as a "lessons learned" survival tool to avoid "garbage in -- garbage out" conditions.	part number represents in its relationship to a specific part number under a specific NSN. Some say the CAGE is the qualified source for an unidentified part number or drawing. Others claim the CAGE is the "design control activity" (in the context of what engineering/configuration calls the current design activity). Others, assimilating direct contradictions in some instances, insist the CAGE is both, or "manufacturer" (current design activity and actual manufacturer of the part). Importantly, there is no consensus or documented criteria for determining what or who the stated CAGE code represents in relation to any of the one or more "part/reference numbers". Some catalogers have advised users that the system does not provide any identification of items in the form required by engineering, configuration, DFARSS6 screeners, equipment specialists, acquisition personnel, and other customers, and that such information must be obtained from other resources. Thus, item identification as needed by users is no longer provided under new unsupported interpretations developed since publication of DOD4100.38-M and DOD4200.39-M.
ITEM OF PRODUCTION	**DEFINITION: None.** (Not used by engineering/configuration).	Cataloging directives provide no further guidance for the data elements comprising an "item of production". The relationship of the part number to a CAGE code is not given. This appears to be cataloging's most important term to users, as it refers to the specific, different items stocked under an NSN, but there is no means in the cataloging system of identifying this "item of production".	**DOD 4100.39-M VOL 1: "Consists of those pieces or objects grouped together with a manufacturer's identifying number and conforming to the same engineering drawings, specifications, and inspection."** PRACTICAL APPLICATION: Rarely used term..

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ITEM OF SUPPLY	**Definition: None** COLLOQUIAL DEFINITION: Rarely used, but when used, is used synonymously with “item”. It is not used in connection with a stock number.	In brief, an "item of supply" is the NSN, which is treated as though a single item regardless of the number of different items stocklisted under it. NEVER call a specific item (EX: HYLOK part number HL404-2L) an "item of supply”. **Only an NSN can be called an "item of supply".** Caution: Do not confuse an “item of supply” with an “item of production”. The difference is that an “item of supply” is the NSN, which may include many different “items of productions”.	**DOD 4100.39-M VOL 1: "An item of supply may be a single item of production or two or more items of production that are functionally interchangeable or that may be substituted for the same purpose and that are comparable in terms of use. It is more meticulous (a selection of closer tolerance, specific characteristics, finer quality) than the normal item of production, or may be a modification (accomplished by the user or at request of the user) of a normal item of production."** PRACTICAL APPLICATION: I.e., an "item of supply" is the NSN and all of the different items that are stocklisted under it that cataloging has binned together and used interchangeably in all applications. Importantly, an "item of supply" is NOT a specific item, but the collective identification of all different items thereunder whereby all treated as a single” supply item".

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MANUFAC-TURER	**MIL-STD-100E PARA 3.45 "An individual, company, corporation, firm, or Government activity who:** **a. controls the production of an item, or** **b. produces the item from crude or fabricated materials, or** **c. assembles materials or components, with or without modification, into more complex (sic: or less complex) items .** **DOD4120.3-M, Appendix A-4, par 35: "The actual producer that is responsible for the fabrication or assembly of the final product, as defined by the specification."** PRACTICAL APPLICATION: Sometimes incorrectly used interchangeably with design activity, original design activity, and current design activity.	These two definitions, although appearing the same initially, are radically different. While the standardization, engineering, and configuration definition states that a manufacturer "controls the production of an item" (and not its design), the cataloging definition states that a manufacturer **may** be someone who "controls the DESIGN **and** production of an item" or "produces an item". Therefore, by stating **"may"** rather than "is", **cataloging makes no positive statement about what constitutes a "manufacturer".** It merely suggests range of possibilities about who may be a manufacturer, and does not exclude other possibilities**.** In the 1940s and 1950s, the standardization community also used the term "manufacturer" in the same conflicting context as cataloging. Later, however, standardization created the term "design activity" to prevent confusion between the former conflicting meanings of the term "manufacturer". The term as used in its conflicting meaning by cataloging is some 45 years obsolete. The definition as used by MIL-STD-100 is mandatory for use per Public Law 436.	**DOD 4100.39-M: "A manufacturer may be an individual, company, firm, corporation, or Government activity that controls the design and production of an item, or produces an item from crude or fabricated materials or components, with or without modification, into more complex items."** PRACTICAL APPLICATION: Used interchangeably with design activity, current design activity, prime contractor, reference, reference number, and source.

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MEDALS CAGE CODE	**DEFINITION: None.**	In practice, the "MEDALS CAGE CODE" is synonymous with "Original Design Activity CAGE Code" . This is the CAGE code required by engineering, configuration, and other logistics customers to identify items listed under stock numbers. This code is not currently available in the DLIS for customer use.	**DOD4100.39-M, VOL 12, DRN 2287: "A CAGE code associated with a MEDALS part number."** The MEDALS CAGE code is used to retrieve drawings from repositories without error. The MEDALS CAGE uniquely identifies both the exact document number and part number as established by a specific ODA. Repositories have thousands of drawings that are duplicate numbers of others, and only the ODA CAGE keeps them separate. Thus, the MEDALS CAGE is essential for requesting the proper documents from repositories and avoiding the "right drawing number but wrong CAGE". The same applies to ordering parts. The MEDALS CAGE must be used to avoid delivery of "right part number but wrong CAGE" (erroneous) parts.
NATIONAL ITEM IDENTIFI-CATION NUMBER (NIIN)	**DEFINITION: None.**		**DOD 4100.38-M PARA 1.210.62: "A number assigned to each approved Item Identification under the Federal Cataloging Program. It consists of nine numeric characters, the first two of which are the National Codification Bureau (NCB) Code." See "item identification" definition.**

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ORIGINAL EQUIPMENT MANUFAC-TURER (OEM)	**DEFINITION: None.** PRACTICAL DEFINITION: Engineering and CM personnel rarely use this term. The term has two conflicting meanings when used. The normal useage is in the context of component manufacturers, such as tire and headlight manufacturers, claiming their product is "OEM equipment" (major manufacturing customer using the component in his equipment). Therefore, equipment manufacturers such as Ford, Chrysler, and GM are the OEMs for component parts such as made by Goodyear and Firestone for tires, and Delco and GE for headlights. Thus, *a part ideally has as many OEMs as possible.* Some use "OEM" to mean "original COMPONENT manufacturer". Generally, whatever one thought OEM means, often means the opposite. Use of the term "OEM" should be rigorously avoided. See ODA, CDA, contractor, preparing activity, subcontractor, vendor, etc.	Due to the conflicting definitions of "OEM", *this term should never be used.*	**DEFINITION None**. PRACTICAL DEFINITION: Rarely used by cataloging/provisioning, but when used, is used to mean "prime", "vendor", "actual manufacturer", "design control activity (sic: design activity)", contractor, and supplier, all interchangeably. When used, is normally not used in the same context used by those who manufacture components, such as tires, lights, oil, valves, cylinders, etc., used by OEMs.

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PART NUMBER	**DOD-STD-100C Paragraph 401.5: "Part numbers consist of letters numbers, or combinations of letters and numbers, which may or may not be separated by dashes that are assigned to uniquely identify a specific item. The part number shall be or shall include the design activity drawing number."** PRACTICAL DEFINITION: A part number is a number assigned to a part (i.e. not a drawing, but a PART). Any part number assigned prior to application of MIL-STD-100 for relating part numbers to drawing numbers need not comply with MIL-STD-100, and the part number may have no coherent relationship to the drawing number.	The cataloging and provisioning community informally (but without documented support) equate part numbers directly to reference numbers, and also directly to drawing numbers. COMMENT: ***A part number is assigned to a PART. A drawing number is assigned to a DRAWING.*** Part numbers and drawing numbers are totally unrelated, and represent unrelated entities, even when the numbers are the same. For example, GE part number 4177 is a 47 ton diesel locomotive, and GE drawing number 4177 is a 2 oz sheet of paper with graphics and text. Only MIL-STD-100 forces drawing preparers to establish a coherently numbered relationship to parts and drawings. Again, for emphasis, the difference between GE part number 4177 and drawing number 4177 is 47 tons.	**DOD4100.38: (None)** **DOD4100.39: (None)** **MIL-STD-1388-2B, para 3.9: "See reference number."** **DLA-SC (Cataloging headquarters policy office, Alexandria, VA) letter dtd 2 Feb 91: "In cataloging language, the terms part number' and 'reference number' are interchangeable".**

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PART OR IDENTIFYING NUMBER	**MIL-STD-100E PARA 3.61: "The identifier assigned by the responsible design activity or by the controlling nationally recognized standard which uniquely identifies (relative to that design activity) a specific item. The PIN generally includes the controlling drawing or document number and optional suffix. The PIN does not include the drawing revision identifier, drawing size, or CAGE code. The term "part or identifying number" replaces the terms "part number" and "bulk material identification number". (ASME Y14.24 and MIL-STD-961)** **MIL-STD-100E PARA 404: "The Part or Identifying Number (PIN) shall consist of letters, numbers or combinations of letters and numbers, which may or not be separated by dashes or slashes that are assigned to uniquely identify a specific item. The PIN shall be or shall include the design activity drawing number, and may include a dash number suffix (if applicable). (See 406.6.) The PIN assigned to a specific item and the CAGE code assigned to the drawing of the item provide a unique item identification**.	Importantly, the PIN uniquely identifies an ITEM (not a document), and is unique only with respect to THAT SPECIFIC CAGE CODE ACTIVITY THAT ISSUED THE PIN. All design activities can issue the exact same PIN, such as PIN "4177", but each different PIN "4177" is absolutely unique when used in conjunction with the original issuing design activity CAGE code.	**DEFINITION: None.**

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PRIME	**DEFINITION: None.** PRACTICAL APPLICATION: A contraction of "prime contractor". Often incorrectly used interchangeably with original design activity and current design activity. The prime contractor has no absolutely no relationship whatever to a design activity. (Some at this point inject "but the prime contractor could be the design activity", but "could be" does not equate to "is".)	This term should be avoided.	**DEFINITION: None.** PRACTICAL APPLICATION: Sometimes used in lieu of original or current design activity.
PRIME CONTRACTOR	**DEFINITION: None.**	This term is synonymous with “Contractor”, except that the adjective “Prime” is used to infer the existence of one or more subcontractors to the contractor (see “CONTRACTOR”) . ***The key is that the prime contractor has the contract with the government, and subcontractors have a contract with the prime contractor.*** This term is totally unrelated to drawing or part identification..	**DEFINITION: None.**
REFERENCE	**ASME Y14.24M-1989, APPENDIX A, DEFINITIONS. Reference -- to invoke associated data by callout on an engineering drawing. Such callouts may be located on the field of the drawing, in the general notes, in the parts lists, or elsewhere on the drawing.**	In the case of cataloging, it is not clear whether the term "reference" applies to a reference/part number or document number, and also not clear as to whether it is the combination of a reference/part number or drawing number and "the" (?) CAGE code. If intended to include a CAGE code, it is not clear whether cataloging intends for the CAGE to be the ODA, CDA, government design control activity, supplier/vendor, or a manufacturer for the supplier.	See "design control reference" and "reference number.

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REFERENCE NUMBER	**DEFINITION: None.** PRACTICAL APPLICATION: In engineering data and configuration management, the term "reference number" is a number that has been referenced as a required document or item by a drawing in support of that drawing. EXAMPLE 1: **MIL-STD-100E para 3.3.6:** "Find number or item number. A **reference number** assigned to an item in lieu of the item's identifying number on the field of the drawing and entered as a cross **reference** to the item number of the parts lists where the item name and identification number are given. **Reference** designations in accordance with ANSI/IEEE Std 200 may be used as find numbers or item numbers (ASME Y14.34M) EXAMPLE 2: DOD-STD-100C para 402.3 states "**Referenced** documents. All documents other than Government or non-government specifications or standards shall have a document identification number, and a FSCM number." EXAMPLE 3: DOD-STD-100C para 601.1 for parts lists: "**Reference** documents may also be tabulated on a parts list." (continued on next page)	Highly controversial term in cataloging, with ***three conflicting meanings***: 1. Reference nr = drawing nr, part nr, model nr, catalog nr, trade name, etc. 2. Reference nr = part number and some CAGE code (unspecified as to who) 3. Reference nr = part number. Although cataloging has a fairly clear definition of "reference number" in MIL-STD-1388-2B and DOD4100.38-M (see definition on the right), catalogers are trained that the "reference number" is the "CAGE code and the reference number/part number", although there is nothing in the definition or in cataloging practices to support the claim.. All documentation shows that the reference number does not include the CAGE code. Further, the MCRL list and MCRL guide shows a "reference number" column that does not include CAGE codes. Further, catalogers cannot define who the CAGE code represents in the undocumented "reference number" trainer's definition. When catalogers are asked why the reference number includes the CAGE code, the response is "but you have to know whose part number, therefore the reference number includes the CAGE code". The same rationale, however, could be applied to drawing numbers having to include the CAGE code, because "you have to know whose drawing number, therefore the drawing number includes the CAGE code". (continued on next page)	**DOD4100.38-M: "Any number, other than a Government activity stock number, used to identify an item of production or, used either by itself or in conjunction with other reference numbers, to identify an item of supply. Reference numbers include manufacturer's part, drawing, model, type, source controlling numbers, and the manufacturer's, and the manufacturer's trade name; specification or standard part, drawing, or type numbers. (See chapter IV for modifications of reference numbers.) National Stock Numbers, assigned to Foreign Government National Item Identifications, have been included as reference numbers with an FSCM of 99995."** **MIL-STD-1388-2B PARA 3.12: "Any number, other than a government activity stock number, used to identify an item of production, or used by itself or in conjunction with other reference numbers to identify an item of supply. Reference numbers include: manufacturer's part, drawing, model, type, or source controlling numbers; manufacturer's tradename; specification or standard numbers; and, specification or standard part drawing, or type numbers. See appendix E, Data Element Definition 330."** In other words, a "reference number" is any combination of letters and numbers that cataloging enters into the "reference number" column or field. That entry "identifies" an item of supply (an NSN) by itself if there is only one "reference number" entry, or if there is more than one entry, the group of different reference numbers collectively identify the "item of supply" (i.e., NSN). A "reference number" also identifies the part number portion of the "item of production" (a part number and an undefined CAGE code).

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REFERENCE NUMBER (CONT)		Of course, drawing numbers do not include CAGE codes, although conjunctive use of the ODA CAGE code with the drawing number is necessary for a complete drawing identification. This principle of conjunctive use is the same as using a city name and state name together to uniquely identify a city in the US, such as stating Hollywood, California to uniquely distinguish that city from Hollywood, California and Hollywood, Maine.	A reference number does NOT include a CAGE code. The following shows the "one-way only" umbrella relationship of reference numbers to other numbers: REFERENCE NUMBER ->: PART NUMBER (812293-1) DRAWING NR (8121293) MODEL NR (SRT 101) TYPE NR (BA-77/A) TRADE NAME (DELRIN) SPECIFICATION (GGG-D-196) MIL STD PART NR (MS16116-1) CATALOG NR (24X41) MISC NR (34X4 NO INNER RACE)
SOURCE	**DEFINITION: None.** PRACTICAL APPLICATION: "Source" is considered to be a named or unnamed, unidentified future source for a specifically identified item.		**DEFINITION: None.** PRACTICAL APPLICATION: "Source" is considered to jointly be a part number and where it can be procured, or jointly a reference number and where it can be procured. Also used synonymously with "reference numbers".

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SOURCE OF SUPPLY CODE	**DEFINITION: None.** PRACTICAL APPLICATION: A source identified by its CAGE code, presently or in the future, that can now or potentially supply a specifically identified item. The name and CAGE of the source of supply have no relationship to the item's ODA (original design activity's) or CDA (current design activity) CAGE code and name.		**DEFINITION: DOD4100.39-M VOL 12 DRN9250, "An activity having sole responsibility for submittal of catalog data proposals to the Defense Logistics Services Center where management responsibility includes all items of supply in a given FSC class (Category A Single Submitter) or where management responsibility is determined on a by-item basis within a given FSC class (Category C)."** EXAMPLE: Per DOD4100.39 VOL 10, the source of supply is SA-ALC for NSNs that are assigned a source of supply code of "FPH". I.e., the source of supply in cataloging terminology is always a government facility, and never a contractor. PRACTICAL APPLICATION: In contrast to cataloging directives, cataloging uses the term normally in the context of where the NSN, including all of the different items cataloged under it, can be procured. Often cataloging uses the term to mean both a source and that source's unique part number, in contrast to a potential source for an item identified by some other design activity's CAGE code and part number.
SUBVENDOR	**DEFINITION: None.**	A term often improperly used in lieu of “vendor” or “subcontractor”. The logical definition is “a vendor to a vendor”, with neither involved in a contract. Avoid this term. The proper terms are "Vendor" or "Subcontractor"	**DEFINITION: None.**

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TECHNICAL DATA	**DFARS, PARA 27.401: "Technical data" means recorded information, regardless of form or characteristic, of a scientific nature. It may, for example, document research, experimental, developmental, or engineering work; or be useable or used to define a design or process or to acquire, produce, support, maintain, or operate material. The data may be graphic or pictorial delineations in media such as drawings or photographs; text in specifications or related performance or design type documents; or computer printouts. Examples of technical data include research and engineering data, engineering drawings and associated lists, specifications, standards, process sheets, technical manuals, technical reports, catalog item identifications and related information, and computer documentation. Technical data does not include computer software or financial, administrative, cost and pricing, and management data, or other information incidental to contract administration."**	COMMENT: "Technical data" includes the ***ENTIRE SPECTRUM*** of ***all*** data of a technical nature. Consequently, it is imperative that when one speaks of "technical data", that one ***further specify the exact KIND of technical data***, such as "*technical manuals*", or "***engineering data*** (drawings and associated lists, standards, and specifications), ***provisioning data***, or a ***printout of cataloging data*** from the Federal Cataloging System. A request for "technical data" is confusing, because the deliverable data can be ***any kind of technical data***.	**DFARS PARA 27.401; and DLAR 8400.3: (Identical to Engineering/Configuration definition.)**

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TECHNICAL DATA PACKAGE	**MIL-T-31000 PARA 6.5.20: "A technical description of an item adequate for supporting an acquisition strategy, production, engineering and logistics support. The description defines the required design configuration and procedures required to ensure adequacy of item performance. It consists of all applicable technical data such as drawings and associated lists, specifications, standards, performance requirements, quality assurance provisions, and packaging details."** COLLOQUIAL DEFINITION: A complete set of engineering data.	CAUTION: A "package of technical data" does NOT equate to "technical data package". Technical data, and a "package of technical data" is the entire spectrum of ALL forms of data of a technical nature, and may be technical manuals, test reports, technical analysis, etc. A "technical data package", by unique (and confusing) definition, equates normally to "a package of engineering data". (See "engineering data".) I.e., if one needs drawings and other engineering data, do not use the overly broad term "technical data" to request it. One could get technical manuals instead, for example. Use the term "engineering data" to request drawings and related engineering data. Additionally, a “technical data package” may consist of data not considered to be “engineering data”, such as “operating instructions” which are a form of “technical manuals”.	**DEFINITION: None**.
VENDOR	**MIL-STD-100E, PARA 3.89: A source from whom a purchased item is obtained: used synonymously in this standard with the term “supplier”.**	Use of this term for a supplier or source infers no particular contract involvement. A vendor becomes also a contractor or subcontractor when bound by a specific contract.	**DEFINITION: None.**